State Of California | The Resources Agency of California

Memorandum

Date: January 12, 2004
Telephone: (916) 653-0062
File: 03-SPPE-2

To: Commissioner James A. Boyd, Presiding Member
Chairman William J. Keese, Associate Member

From: California Energy Commission - Jack W. Caswell
1516 Ninth Street
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Energy Facility Siting Project Manager

Subject: **KINGS RIVER CONSERVATION DISTRICT PEAKER PLANT SMALL POWER PLANT EXEMPTION (03-SPPE-2)**

ISSUES IDENTIFICATION REPORT

Attached is staff's Issue Identification Report for the Kings River Conservation District Peaker Plant Application for a Small Power Plant Exemption (03-SPPE-2). This report serves as a preliminary scoping document that identifies the issues that Energy Commission staff believes will require careful attention and consideration. Energy Commission staff will present this Issues Identification Report at the Siting Committee's Informational Hearing when scheduled.

Attachment

cc: Docket (03-SPPE-2)
Proof of Service List

KINGS RIVER CONSERVATION DISTRICT
PEAKER PLANT
SMALL POWER PLANT EXEMPTION
(03-SPPE-2)

January 12, 2004

ISSUES IDENTIFICATION REPORT

CALIFORNIA ENERGY COMMISSION

Systems Assessment and Facilities Siting Division

ISSUE IDENTIFICATION REPORT

KINGS RIVER CONSERVATION DISTRICT
PEAKER PLANT
APPLICATION FOR SMALL POWER PLANT EXEMPTION
(03-SPPE-2)

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ISSUES IDENTIFICATION REPORT

California Energy Commission Staff

This report has been prepared by the California Energy Commission (Energy Commission) staff to inform the Committee and all interested parties of the potential issues that have been identified in the case thus far. These issues have been identified as a result of our discussions with federal, state, and local agencies, and our review of the Kings River Conservation District Peaker Plant, Application for a Small Power Plant Exemption (SPPE), Docket Number 03-SPPE-2. This Issue Identification Report contains a project description, summary of potential issues, and a discussion of the proposed project schedule. The staff will address the status of issues and progress towards their resolution in periodic status reports to the Committee.

PROJECT DESCRIPTION

On November 26, 2003, the Kings River Conservation District (KRCD) filed an application for a Small Power Plant Exemption (SPPE), (03-SPPE-2). KRCD is seeking an exemption from the Energy Commission licensing requirements.

KRCD proposes to construct and operate a 97-megawatt (MW) generation plant called the Kings River Conservation District Peaking Plant (KRCDPP). The simple cycle plant will consist of two General Electric LM 6000 SPRINT PC model, natural gas combustion turbines. The project will use a water injection system into the combustion turbines and Selective Catalytic Reduction (SCR), and an oxidation catalyst system to reduce air emissions. Part of the proposed project includes the construction of approximately one-half mile of new 115kV transmission line interconnecting to a PG&E substation. Additionally, a short PG&E natural gas supply line will deliver the fuel to the project site. Water supply is proposed to be provided by the Malaga County Water District system. The project is proposed to be located on a 19-acre industrial site south of Fresno near the community of Malaga, California, in Fresno County, at 2611 E. North Avenue. The power plant will occupy the southern 9.5 acres of the 19- acre site while the northern 9.5 acres will be the construction staging area.

The project is estimated to have a capital cost of approximately $40 million. The applicant plans to complete construction by December 2004, and start operation in 2005. During construction, up to approximately 101 construction jobs will be created with an average of 68 workers over the 6-month construction schedule. A permanent professional workforce of 3 employees will operate the plant.

POTENTIAL MAJOR ISSUES

Public Resource Code section 25541 states “[t]he commission may exempt … thermal power plants with a generating capacity of up to 100 megawatts and modifications to existing generating facilities that do not add capacity in excess of 100 megawatts, if the commission finds that no substantial adverse impact on the environment or energy resources will result from the construction or operation of the proposed facility or from the

modifications." The SPPE process is different from the Application for Certification (AFC) process since the Energy Commission will not license the project but exempt the project from the licensing process. If an exemption is granted, the applicant would need to secure the appropriate licenses and permits for the project from various local, state and federal agencies. The Energy Commission is the lead agency under the California Environmental Quality Act (CEQA).

The SPPE process also uses a different format of analysis from that used in the AFC process. For an SPPE, staff prepares an Initial Study that evaluates whether the project will result in any significant environmental impacts, identifies mitigation measures that will reduce those impacts to less than significant, and establishes proposed conditions of exemption. Staff will use the Environmental Checklist Form contained in CEQA Guidelines Appendix G (California Code of Regulations, Title 14, section 15063 (f)) as a guideline for the issues that will be examined in the Initial Study.

This Issue Identification Report contains staff's preliminary findings. The following discussions focus only on those issues where staff has concluded that (a) a "potentially significant impact" may occur, (b) resolution of an issue or issues may cause delay in the schedule, or (c) where staff has insufficient information at this time to reach a conclusion. The Committee should be aware that this report may not include all the significant issues that may arise during the case, as discovery is not yet complete, and other parties have not had an opportunity to identify their concerns. However, we do not currently believe such an issue will have an impact on the schedule or that resolution will be difficult to achieve.

This report does not limit the scope of staff's analysis throughout this proceeding but acts to aid in the analysis of potentially significant issues that the KRCDPP proposal poses. The following discussion summarizes each potential issue, identifies the parties needed to resolve the issue and, where applicable, suggests a process for achieving resolution. However, staff does not see any of these potential issues as insolvable.

The following sections contain staff's preliminary findings. The Initial Study will provide additional analysis supporting staff's conclusions, descriptions of the recommended mitigation measures and conditions of exemption.

AIR QUALITY

There are two potentially critical air quality issues that may affect the timing and possible outcome of the licensing process for the KRCDPP. They are:

1) Emissions offsets for mitigation; and
2) Best Available Control Technology for permitting requirements.

PROJECT EMISSIONS OFFSETS

The project proposal mentions that CEQA mitigation would be in the form of emission reduction credits (ERCs). However, the application does not provide any detail on how a mitigation ratio of 1:1 for all non-attainment pollutants and their precursors would be

satisfied (this includes NOx, PM10, VOC and SO2). Staff has requested specific data, and the applicant has offered to provide it as soon as possible. Nonetheless, the validity of certain ERCs and any inter-pollutant trading schemes, if they are proposed, can complicate the review of the mitigation package. Because the completeness of the mitigation cannot yet be ascertained by staff, this issue could affect the timing or the outcome of the SPPE process.

BACT FOR COMBUSTION TURBINES

The application includes a proposed determination that the combustion turbines should achieve 3.0 ppmvd of NOx on a 1-hour basis to satisfy Best Available Control Technology (BACT) requirements. Staff believes that the proposed 3.0 ppmvd NOx limitation (1-hour basis) may be inconsistent with the BACT limit being contemplated by the San Joaquin Valley Air Pollution Control District and the U.S. Environmental Protection Agency (U.S. EPA) for another similar case. If operated as proposed, the similar Modesto Irrigation District (MID), Ripon case (03-SPPE-01) would achieve 2.5 ppmvd NOx. While staff is uncertain which BACT determination will be applicable for KRCD, staff has found on other cases that complex BACT discussions between applicants, local air districts, and the U.S. EPA can delay the air district's permitting process.

WATER & SOIL RESOURCES

There are two potentially critical water quality issues that may affect the timing and possible outcome of the review process for the Kings River Conservation District peaking plant (KRCDPP). They include:

1) The project may increase the cumulative impacts to ground water supply; and
2) Storm water discharge during operation of the plant may impact groundwater quality.

CUMULATIVE IMPACTS TO THE GROUNDWATER BASIN

The SPPE Application for the KRCDPP project proposes to use the evaporation of potable water derived from groundwater for heat rejection associated with the inlet air cooling system. The potable water would be supplied by Malaga County Water District. The groundwater basin is severely overdrafted, and the KRCDPP proposes to use approximately 75 acre-feet per year of water contributing to the overdraft. Increasing the overdraft can be determined to be a significant adverse cumulative impact to the groundwater resource. The KRCDPP has not proposed any mitigation measures to reduce the impacts of increasing the groundwater overdraft. Staff has submitted data requests to the applicant to obtain the information it needs. Staff continues to work with the applicant to resolve this issue.

STORM WATER QUALITY

The KRCDPP project proposes to discharge storm water to an on-site storm water retention pond. The water discharge to this pond will percolate through the sandy soil and recharge the shallow ground water beneath the site. Ground water at the site is currently about 50 feet below ground surface. The storm water retention pond is

approximately 22 feet deep at its deepest point. The depth to ground water is currently about 30 feet below the bottom of the pond. During operation of the KRCDPP any contaminates (i.e. oil, grease, solvents, chemicals to prevent bio-fouling and scaling, etc.) that enter the storm water and are discharged to the detention basin would rapidly percolate through the soil and contaminate the ground water resource. Staff has submitted a data request to the applicant to obtain the information regarding the monitoring and processing of storm water prior to discharge to the detention basin. Staff continues to work with the applicant to resolve this issue.

SCHEDULE

Staff received comments on noise from Fresno County which indicated that additional comments will be provided as soon as possible. Staff is addressing the county concerns in their analysis. Timely responses to data requests and resolution of the issues noted in this report are necessary to stay within the time frames of the attached proposed schedule. All agencies, interveneors and interested parties will be informed of future workshops and project events.

PROPOSED SCHEDULE
KINGS RIVER CONSERVATION DISTRICTS PEAKER PLANT
(03-SPPE-02)

EVENT	DATE
Receive document (SPPE)	26-Nov-03
Data requests to KRCD	17-Dec-03
Committee Appointed	17-Dec-03
Agency comments	30-Dec-03
Issue Identification Report	09-Jan-04
Notice Data Response & Issue Resolution Workshop	14-Jan-04
Data Responses Received from KRCD	16-Jan-04
Site Visit/Information Hearing	26-Jan-04
Data Response and Issue Resolution Workshop	26-Jan-04
Status Report	01-Feb-04
File Draft Initial Study	11-Feb-04
Notice Draft Initial Study Workshop	13-Feb-04
Draft Initial Study Workshop	23-Feb-04
Notice Prehearing Conference	26-Feb-04
Prehearing Conference	08-Mar-04
Issue Final Initial Study	10-Mar-04
Hearings	18-Mar-04
Proposed decision	01-Apr-04
Staff/Parties file comments on proposed decision	15-April-04
Final hearing on Decision	28-April-04